REMARKS

This application has been carefully reviewed in light of the Office Action dated November 16, 2006. Claims 1-10 remain in this application. Claim 1 is the independent Claim. It is believed that no new matter is involved in the arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Art-Based Rejections

Claims 1-3, 5-7, 9 and 10 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,533,754 (Hisamatsu) in view of U.S. Patent No. 5,879,369 (Ishida); Claim 4 was rejected as obvious over Hisamatsu in view of Ishida and U.S. Patent No. 5,085,635 (Cragg); Claim 8 was rejected as obvious over Hisamatsu in view of Ishida and U.S. Patent No. 5,766,203 (Imran).

Applicants respectfully traverse the rejections and submit that the claims herein are patentable in light of the arguments below.

The Hisamatsu Reference

Hisamatsu is directed to a guide wire aperture 141 that is a distance L of 5 mm or less from the distal end of the proximal shaft 15 *(See Hisamatsu; Col. 6, lines 6-8).*

The Ishida Reference

Ishida is directed to providing an improved balloon which has an adequate strength and is flexible enough to give a satisfactory tracking capability. The balloon comprises a three-layer tube with a PET base layer, a first polyester

elastomer middle layer and a second polyester elastomer outside layer *(see Ishida; Col. 1, line 66 – Col. 2, line 2, Col. 16, liens 31-67).*

The Cragg Reference

Cragg is directed to an angiographic catheter with a valve covering the end-hole on the distal end *(See Cragg; Abstract).*

The Imran Reference

Imran is directed to a sheath for advancement into a vessel of a patient having a stenosis therein which at least partially occludes the flow of blood in the vessel *(See Imran; Abstract).*

The Claims are Patentable Over the Cited References

The present application is generally directed to a balloon catheter.

As defined by independent Claim 1, an intravascular temporary occlusion balloon catheter includes a balloon composed of a highly tensile material having an elongation at break of 300% to 1,100% and a shaft composed of a highly elastic material and having an outer diameter in the range of 0.014 in. (0.3556 mm) to 0.018 in. (0.4572 mm) and a bending modulus of at least 1 GPa. A lumen for tracking the guidewire is provided at a catheter distal-end portion only.

The applied references do not disclose or suggest the features of the present invention as defined by independent Claim 1. In particular, the applied references do not disclose or suggest a shaft having, "a bending modulus of at least 1 GPa," as required by independent Claim 1.

Ishida is directed to providing an improved balloon which has an adequate strength and is flexible enough to give a satisfactory tracking capability *(see Ishida; Col. 1, line 66 – Col. 2, line 2).* The balloon has a low tracking capability to advance along flexures in a tubular organ *(see Ishida; Col. 1, lines 35-37).* As is clear from the context of Ishida, the tracking capability refers only to the balloon and not to the shaft. Applying the flexible material to the shaft would make transferring power from a proximal side to a distal end of the catheter difficult, making such a shaft undesirable. Therefore, Ishida does not disclose or suggest a shaft having a bending modulus as disclosed in Col. 16, lines 36-38 of Ishida.

In contrast, independent claim 1 requires a shaft to have a bending modulus of at least 1 GPa. Ishida does not disclose or suggest this feature and does not remedy the deficiencies of Hisamatsu.

Moreover, Applicant respectfully submits that the combination of Hisamatsu and Ishida is improper hindsight afforded only by the benefit of Applicant's invention. Neither Hisamatsu nor Ishida acknowledges or appreciates the problem addressed or the solution provided by Applicant. The only possible motivation for combining these references is the impermissible hindsight that is afforded by Applicant's invention. If Hisamatsu's purpose and context are considered, one of ordinary skill would find it makes no sense and there is no motivation to modify Hisamatsu with the teachings of Ishida.

Furthermore, the applied references do not disclose or suggest an, "elongation at break of 300% to 1,100%," as required by independent Claim 1.

Ishida discloses a balloon catheter comprising a three-layer tube with a PET base layer, a first polyester elastomer middle layer and a second polyester elastomer outside layer *(see Ishida; Col. 16, liens 31-67).* The properties of the three

layers are provided individually. However, Ishida does not disclose or suggest the properties of the manufactured balloon catheter containing all three layers together. The disclosed properties of the individual layers cannot be assumed to be maintained in the balloon catheter since the manufacturing process is not taken into consideration.

In contrast, claim 1 requires an elongation at break of 300% to 1,100% of a balloon catheter. Ishida does not disclose or suggest this feature and does not remedy the deficiencies of Hisamatsu.

Thus, Hisamatsu and Ishida do not disclose or suggest these features of the present invention as required by independent Claim 1, and the ancillary references do not remedy the deficiencies of Hisamatsu and Ishida.

Since the applied references fail to disclose, teach or suggest the above features recited in independent Claim 1, those references cannot be said to anticipate nor render obvious the invention which is the subject matter of that claim.

Accordingly, independent Claim 1 is believed to be in condition for allowance and such allowance is respectfully requested.

The remaining claims depend either directly or indirectly from independent Claim 1 and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance.

For example, the applied references fail to disclose or suggest a "lumen for tracking the guidewire has a proximal-side guidewire port located at a position within 10 mm from the proximal end of the inflated balloon," as required by dependent Claim 3.

Hisamatsu discloses in column 6, lines 6-8, FIG. 2 and 4, a guide wire aperture 141 that is a distance L of 5 mm or less from the distal end of the proximal shaft 15, and not within 10 mm from the proximal end of the inflated balloon, as recited by Claim 3. The ancillary references do not remedy the deficiencies of Hisamatsu.

Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4721 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
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